

**Introduction.** Health technology reassessment (HTR) is a structured evidence-based assessment of an existing technology in comparison to its alternatives. The process results in the following four outputs: (i) increased use; (ii) decreased use; (iii) no change; or (iv) de-adoption. However, implementing these outputs remains a challenge. Knowledge translation (KT) can be applied to implement findings from the HTR process. This study sought to identify which characteristics of KT theories, models, and frameworks (TMFs) could be useful, specifically for decreasing the use of or de-adopting a technology.

**Methods.** A qualitative descriptive approach was used to ascertain the perspectives of international KT and HTR experts on the characteristics of KT TMFs for decreasing the use of or de-adopting a technology. One-to-one semi-structured interviews were conducted. Interviews were audio recorded and transcribed verbatim. Themes and sub-themes were deduced from the data through framework analysis using the following five distinctive steps: familiarization; identifying an analytic framework; indexing; charting; and mapping and interpretation. Themes and sub-themes were also mapped to existing KT TMFs.

**Results.** Thirteen experts participated. The following three themes emerged as ideal characteristics of a KT TMF: (i) principles foundational for HTR: evidence-based, high usability, patient-centered, and ability to apply to micro, meso, and macro levels; (ii) levers of change: characterized as positive, neutral, or negative influences for changing behavior; and (iii) steps for knowledge to action: build the case for HTR, adapt research knowledge, assess context, select, tailor, and implement interventions, and assess impact. The Consolidated Framework for Implementation Research had the greatest number of ideal characteristics.

**Conclusions.** Application of KT TMFs to the HTR process has not been clearly established. This is the first study to provide an understanding of characteristics within KT TMFs that could be considered by users undertaking projects to decrease or de-adopt technologies. Characteristics to be considered within a KT TMF for implementing HTR outputs were identified. Consideration of these characteristics may guide users in choosing which KT TMF(s) to use when undertaking HTR projects.

## PP106 Twenty Years Of Orphan Medicines Regulation: Have Treatments Reached Patients In Need Across Europe And Canada?

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**Introduction.** The European Union regulation for orphan medicinal products (OMPs) was introduced to improve the quality of treatments for patients with rare conditions. To mark 20 years of European Union OMP regulation, this study compared access to OMPs and the length of their reimbursement process in a set of European countries and Canadian provinces. Access refers to their full or partial reimbursement by the public health service.

**Methods.** Data were collated on European Medicines Agency orphan designation and marketing authorizations, health technology assessment (HTA) decisions and reimbursement decisions, and the

respective dates of these events for all the OMPs centrally authorized in 14 European countries (Belgium, England, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Scotland, Slovakia, Spain, Sweden, and Switzerland) and four Canadian provinces (Alberta, British Columbia, Ontario, and Quebec).

**Results.** Since the implementation of the OMPs Regulation in 2000, 215 OMPs obtained marketing authorization. We found that Germany had the highest level of coverage, with 91 percent of OMPs being reimbursed. The three countries with the lowest reimbursement rates were Poland, Hungary, and Norway (below 30%). We observed that Germany had the quickest time to reimbursement following marketing authorization, followed by Switzerland and Scotland. We observed that Poland, Hungary, and Slovakia consistently had the longest time to reimbursement.

**Conclusions.** We observed substantial variation in the levels and speed of national reimbursement of OMPs, particularly when comparing countries in Eastern and Western Europe, which suggests that an equity gap between the regions may be present. The data also indicated a trend toward faster times to reimbursement over the past 10 years.

## PP112 Review On Change Management Models In Multi-Lateral, Multi-Stakeholder Contexts To Engage Stakeholders

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and Milou Hogervorst

**Introduction.** To facilitate implementation of new health technology assessment (HTA) methods, it is crucial to engage stakeholders. A technically good system may be brought to its knees if the intended users are not willing or able to use it. Therefore, based on these considerations, we aimed to identify relevant aspects of change models and investigated four potentially useful change models in the context of HTA. The four models were: adaptive space; midstream modulation; developmental evaluation; and knowledge brokering.

**Methods.** A narrative literature review was conducted to gather information into a readable and usable format. PubMed and Google Scholar were searched for relevant literature on change management and stakeholder engagement within HTA. Additionally, grey literature was selected after consulting an implementation specialist to gather more information on the background of the change management models.

**Results.** Several enabling factors for successful stakeholder engagement were found, including attention to branding of the coproduction, facilitation/personal safety, and data or indicators to inform activities. Four change methods were described from the enabling factors identified. There was no "perfect model" for our aim, but all models involved relevant aspects to engage stakeholders. Notably, all models paid attention to the project management factor, whereas none of the models paid explicit attention to the branding of the coproduction factor.

**Conclusions.** Change management is a complex and elaborate field in which many factors play a role. Stakeholder engagement is a factor that might be influenced by project leaders within international projects such as the European Union's Next Generation

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Health Technology Assessment (HTx). To improve stakeholder engagement in modernizing HTA, it is important to keep paying attention to project management, relationships, and how to facilitate fora and meetings to improve mutual understanding. Two factors to pay more attention to are branding of the coproduction and consideration of formal structures.

## PP118 A Survival Analysis Of The Lag Times In The Publication Of Network Meta-Analyses

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**Introduction.** The use of inconsistent and outdated information may significantly compromise healthcare decision-making. We aimed to assess the extent of lag times in the publication and indexing of network meta-analyses (NMAs).

**Methods.** Searches for NMAs on drug interventions were performed in PubMed (May 2020). Lag times were measured as the time between the last systematic search and the date of the article's submission, acceptance, online publication, indexing, and Medical Subject Heading (MeSH) allocation. Correlations between lag times and time trends were calculated by means of Spearman's rank correlation coefficient. Time-to-event analyses were performed considering independent variables such as geographical origin, journal impact factor, Scopus CiteScore, and open access status.

**Results.** We included 1,245 NMAs. The median time from last search to article submission and publication was 6.8 months and 11.6 months, respectively. Only five percent of authors updated their literature searches after submission. There was a very slight decreasing historical trend for acceptance ( $r = -0.087$ ;  $p = 0.01$ ), online publication ( $r = -0.08$ ;  $p = 0.008$ ), and indexing lag times ( $r = -0.080$ ;  $p = 0.007$ ). Journal impact factor influenced the MeSH allocation process (log-rank  $p = 0.02$ ). Slight differences were observed for acceptance, online publication, and indexing lag times when comparing open access and subscription journals.

**Conclusions.** Authors need to update their literature searches before submission to reduce evidence production time. Peer reviewers and editors should ensure that authors comply with NMA standards and encourage the development of living meta-analyses.

## PP119 Innovative Screening System For COVID-19 Using Application Of Artificial Intelligence For Telemedicine

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**Introduction.** Artificial intelligence (AI) and innovative technology offer opportunities for enhanced health care during the COVID-19 pandemic. Populations living in low-income countries do not have access to reverse transcription polymerase chain reaction (RT-PCR) testing for COVID-19 and, thus, depend on the scarce resources of their health system. In this context, an automated screening system for COVID-19 based on AI for a telemedicine platform could be directed towards alleviating the current lack of trained radiologists who can interpret computed tomography images at countryside hospitals.

**Methods.** This descriptive study was carried out in Paraguay by the Telemedicine Unit of the Ministry of Public Health and Social Welfare in collaboration with the Department of Biomedical Engineering and Imaging of the Health Science Research Institute and the University of the Basque Country. The utility of the screening system for COVID-19 was analyzed by dividing the results from two tailored AI systems implemented in 14 public hospitals into four likelihood levels for COVID-19.

**Results.** Between March and October 2020, 911 COVID-19 diagnoses were performed in 14 regional hospitals (62.6% were men and 37.4% were women). The average age of the patients diagnosed with COVID-19 was 50.7 years; 59.1% were aged 19 to 59 years. The two AI systems used have different background information for detecting COVID-19. The most common findings were severe pneumonia and bilateral pneumonia with pleural effusions. The role of computed tomography was to find lesions and evaluate the effects of treatment. The sensitivity of AI for detecting COVID-19 was 93%.

**Conclusions.** AI technology could help in developing a screening system for COVID-19 and other respiratory pathologies. It could speed up medical imaging diagnosis at regional hospitals for patients with suspected infection during the COVID-19 pandemic and rationalize scarce RT-PCR and specialized human resources in low-income countries. These results must be contextualized with the local or regional epidemiological profile before widespread implementation.

## PP126 Radiofrequency Ablation For Metastatic Spinal Lesions

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**Introduction.** About 70 percent of metastatic breast, lung, and prostate cancers affect the bones. When this phase of the disease affects the spine, the mobility and quality of life of patients are severely impaired. Radiofrequency ablation (RFA) has become a feasible option in the palliative treatment of vertebral metastases due to its minimal invasiveness and short procedure time. This health technology assessment report aimed to identify, evaluate, and synthesize evidence on the safety, effectiveness, and cost effectiveness of RFA for vertebral metastases.

**Methods.** A systematic search was conducted to identify literature published from December 2016 to July 2019 in the following